REMARKS

The *Office Action* and *Advisory Action* have been received and reviewed. Of the rejections provided in the Office Action, only the rejection based on 35 U.S.C. 112 has been maintained in the *Advisory Action*, and a response to the 35 U.S.C. 112 rejection is provided below.

Rejection Of Claims Under 35 U.S.C. 112

Claims 1, 3-16, 18-30, 32-41, 43-45 and 47 were rejected under 35 U.S.C. 112, first paragraph. In the Office Action, it was argued that the claims include subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention.

It was argued in the *Advisory Action* that "the claim(s) contain subject matter, which are not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention."

Previously, Applicant argued that:

1) a person skilled in the art of computers would know how to cause a computer to analyze an electronic source document to determine a referenced entity identified in the document, and

(2) at page 4 of the application, an example of the invention is provided, and at page 4, lines 1-3 it states, "the invention scans a document, and matches it against a database of known individuals and organizations." One having skill

in the art of computers would know from this
description at least one manner of causing a
computer to analyze an electronic source document
to determine a referenced entity identified in
the document.

(See Applicant's Responses dated October 6, 2005, and March 9,
2006, which are incorporated herein by reference.)

The *Advisory Action* states that the specification "gives
very little information about where or how the analyzing system
operates." The Examiner states that he "knows of no such
technology that was available at the time the invention was
made, nor would one of skill in the art have been able to
construct such an analyzing system; and the application is
silent as to how the analyzing step is completed."

In general, scanning a source document for a referenced
entity can be as simple as performing a key word search within a
document. The source document can be in a standard format such
as HTML, PDF, Word, etc. Examples of known analyzing systems
and methods are described below that would enable a person
skilled in the art to make and use the invention.

In the *Information Disclosure Statement* dated April 19,
2001, Applicant previously cited <u>Sotomayor</u> (US 5,708,825, issued
January 13, 1998) and <u>Barbic at al.</u> (US 4,823,306, issued April
18, 1989). The Abstract of <u>Sotomayor</u> recites, in part:

> "Method and apparatus to enable scanning one
> or more documents, automatically identifying
> significant key topics, concepts, and
> phrases in the documents, and creating

summary pages for, and hyperlinks between,
some or all of these key topics"

Sotomayor discloses an analyzing system and method for
identifying topics in a document and creating hyperlinks between
topics. Sotomayor shows that a system and method for analyzing
a document identifying significant key topics, concepts, and
phrases in the documents was known at the time of filing the
present application. This runs counter to the statements made
in the *Advisory Action*.

The Abstract of Barbic, et al. recites, in part:

> "In a searching for library documents that
> match the content of a given sequence of
> query words, a set of equivalent words are
> defined for each query word along with a
> corresponding word equivalence value
> assigned to each equivalent word. Target
> sequences of words in a library document
> which match the sequence of query words are
> located according to a set of matching
> criteria."

Barbic, et al. discloses "a method and an apparatus for
retrieving, from among a library of more than one document,
those that match the content of a sequence of query words."
(Col. 1, lines 61-64.) Barbic, et al. discloses a document
retrieval and analyzing method and system wherein the document
is searched for key words and the key words are identified.
Barbic, et al. shows that key word searches, and the like, were

known at the time of filing the present application, which runs counter to the statements made in the *Advisory Action*.

In further support of the point that searching a document for a referenced entity or keyword was known in the art at the time the application was filed, Applicant submits herewith a *Supplemental Information Disclosure Statement* citing the following articles:

1) Berenci, E., Carpineto, C., Giannini, V., and Mizzaro, S.; "Effectiveness of Keyword-Based Display and Selection of Retrieval Results for Interactive Searches," International Journal on Digital Libraries, Nov. 3, 2000, Vol. 3, No. 3, pp. 249-260.

2) Myers, Eugene W.; "A Sublinear Algorithm for Approximate Keyword Searching," Algorithmica, October 1994, Volume 12, Numbers 4-5, pp. 345-374.

3) Watson, B.W. and Zwaan, G.; "A Taxonomy of Sublinear Multiple Keyword Pattern Matching Algorithms," SCIPROG: Science of Computer Programming, Sept. 1996, Vol. 27, No. 2, pp. 85-118.

<u>Berenci</u> recites, at page 3, lines 14-20:

> "Web search services have heavily favored best matching over other types of document retrieval...First of all, while we are often primarily interested in precision rather than recall, there is evidence that the best matching retrieval achieves lower precision ratios than exact matching retrieval for large databases, and this difference increases as databases grows."

Berenci discloses a system and method where a user enters a query, their system collects the query results and shows a subset of the document summaries and a graphical visualization of results. Berenci contemplates that an exact matching retrieval system, such as a key word search, is more precise than a best matching retrieval system. Berenci shows that a system and method for analyzing a document for a key word, or a referenced entity, was known at the time of filing the present application. This runs counter to the statements made in the Advisory Action.

Myers recites at page 1, line 1:

> "Given a relatively short query string W of length P, a long subject string A of length N, and a threshold D, the approximate keyword search problem is to find all substrings of A that align with W with not more than D insertions, deletions, and mismatches."

Myers discloses a method for performing a keyword search to analyze a document to find any query strings W (search terms) within the subject string A (document). Myers shows that keyword searching was known at the time of filing the present application. Myers shows that a method for analyzing a document identifying significant key words, concepts, and phrases (search terms) in the document was known at the time of filing the present application. This runs counter to the statements made in the Advisory Action.

Watson recites at the Introduction on page 1, line 1:

"The keyword (or string) pattern matching
problem can informally be described as the
problem of finding all occurrences of
keywords (strings) from a given set as
substrings in a given (input) string. This
problem is encountered in many areas and in
several forms. In computing science, for
instance, it plays a role in text
search/analysis, lexical analysis, and data
processing. In biology it is encountered in
the analysis of, amongst others, DNA
sequences. This problem can also be
generalized to the matching of regular
expressions, tree patterns, and graph
patterns, none of which is treated here."

Watson discloses a method for performing "keyword pattern
matching" to analyze a document for a given set of keywords
(strings). Watson shows that a method for analyzing a document
for a referenced entity was known at the time of filing the
present application. This runs counter to the statements made
in the Advisory Action.

These references illustrate that at the time the
application was filed it was known to analyze a document for a
referenced entity, keyword, object, or number. A person skilled
in the art would be able to make and use an analyzing system
with the claimed invention. It is therefore respectfully
submitted that the specification is enabling. It is requested
that the rejection of the claims under 35 U.S.C. 112 be removed.

A further point was raised in the *Advisory Action* that "the
invention gives very little information about where or how the
analyzing system operates." The functionality of a distributed

network like the World Wide Web removes part of the distinction of physical location and logical function. A program running on a connected computer in Cleveland (Computer A) can pull a source document from a public Web server in Australia as easily as it can pull a document off of its own hard drive. Computer A could then analyze the document (as disclosed in <u>Sotomayor</u>) directly, or forward the document to another computer (Computer B, in France as an example) for analyzing. <u>Sotomayor</u> also discusses the distributed nature of performing logical analysis on a document in a distributed network: "any of the documents viewed with the program may be located (or scattered in pieces) on any computer connected to [a] network." (Column 6, line 19-21). Accordingly, it is submitted that the operation of the system analyzing a document on a network of computers was known at the time the application was filed, thereby enabling a person skilled in the art to make or use the claimed invention.

The *Advisory Action* states that "the specification and claims fails to disclose or teach how a user could create a system (complete a method) that would analyze a source document for entities." Page 11, line 20 of the specification clearly illustrates the functioning of the system. A search of the document (a text search in the preferred embodiment) is matched against the known Points of Contact (Fig 1, 18). This can be a straight forward text search or a more sophisticated technology (such as that disclosed in <u>Sotomayor</u>) which analyzes the semantic structure of the document itself to extract critical information:

> "...a program running on a computer which
> automatically analyses textual data in a

source document 20, and using weighting
rules determines from the textual data what
are the most significant phrases...."
(<u>Sotomayor</u>, Column 8, lines 28-32.)

The *Advisory Action* states that the system "would have to
analyze every document viewed by the user (no step is disclosed
for selecting a specific document to analyze), scanning every
single letter/word/number, and somehow determine that the word
structure was that of a name/place/organization." The
specification at pages 9-10 and Figs. 2A, 2B and 2C provide
three specific examples of how a document may enter the system.
These three specific methods for acquiring a source document
provide that a specific document be selected for analysis. This
is contrary to the statements made in the *Advisory Action*.
Furthermore, nowhere do the claims require analysis of every
document viewed by a user as suggested in the *Advisory Action*.

The *Advisory Action* also states that "the
specification/claims fail to describe how the system...would
analyze a document for 'entities that are not explicitly
referenced in the document but may have substantive bearing on
the issues discussed in the document.'" The specification
discusses at page 14 how the system would analyze a document for
entities that are not explicitly referenced in the document. A
database is provided (Figure 1, 24) and referred to as the
hierarchy indexer which allows the user to manually input an
organizational hierarchy into the system (e.g.,: what
congressman is on the Finance Committee; who now owns the
Cleveland Cavaliers; what executive at General Electric is in

charge of the Hudson River clean up.) Additionally, the system
can learn from other users' interests (in the same document) to
automatically suggest which referenced entities are the most
desired via the Point of Contact Keyword Datastore (Fig 1, 26).
This runs counter to the statements made in the Advisory Action.

If the Examiner continues to believe that the claims should
be rejected under 35 U.S.C. 112 on grounds that the application
does not enable one having skill in the art to make and use the
invention because such a person would not (1) know how to use a
computer to analyze an electronic source document available on a
network of computers to determine a referenced entity, or (2)
know how to scan every letter/word/number of such a document, or
(3) know how to analyze an electronic source document to
identify entities that are not explicitly referenced in the
source document but which may have bearing on the issues
discussed in the source document, then the Examiner is directed
to page 14, line 15 of the application, page 12, line 20 of the
application, and the documents cited in the *Information
Disclosure Statement* dated April 19, 2001, and *Supplemental
Information Disclosure Statement* submitted concurrently with
this *Response.*

For the reasons set forth above, it is respectfully
requested that the 35 U.S.C. 112 rejection be withdrawn.

CONCLUSION

In view of the foregoing remarks, it is respectfully submitted a full and complete response to the *Office Action* and *Advisory Action* has been made. The claims are in condition for allowance, and allowance of the claims is respectfully requested.

The Applicant believes that a three-month extension of time fee is due with this *Response*. Please consider this as a petition for an extension of time sufficient to enter this *Response*. Please charge any fees required to have this *Response* entered to Deposit Account No. 08-2442.

The Examiner is invited to call Applicant's attorney/agent if any questions remain following review of this response. If it will help, the undersigned is willing to explain by telephone or in person, the reasons the claims are allowable.

Respectfully submitted,

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